

XVII.—Description of a new Madeiran Pupa.

By R. T. LOWE, M.A.

Pupa Wollastoni, Lowe. (§ *Alvearella*, Lowe.)

T. majuscula, solidiuscula, compacta, curta, late abbreviato-oblonga, utrinque obtusa, latitudine per anfractus 2–2½ ultimos subæquali $\frac{2}{3}$ – $\frac{5}{6}$ longitudinis æquante, deinde subito per reliquos anfractus in apicem umbonato-prominulum contracta, tota obsolete striatula lævigata nitens fusco-umbrina (spira apicem versus alba decorticata), angustissime pallide 1–2-fasciata; anfractibus sex planatis v. convexiusculis, 2–3 ultimis infra suturam subcanaliculatam abrupte gibboso-prominentibus scalatis, ultimo antice medio distinctius concaviusculo v. leviter pone labrum spiraliter subcanaliculato, striolis subflexuoso-obliquis obsoletis transversis, sutura impressa exarata profunda; apertura subtrilobato-auriformi s. triangulari, angulis rotundatis, ringente, 5-plicata, plicis 2 ventralibus exteriore majore, 2 columellaribus inferiore majore, 1 palatali, 2 ventralibus columellarique inferiore subæqualibus conspicuis magnis, columellari superiore palatalique minoribus subinconspicuis immersis; labro subincrassato reflexiusculo superne inflexo-sinuato, denticulo ad sinum distincto intus prominulo, sinu respirationis subcompleto distincto.

Longit. 3 millim.; diam. 2½; apert. 1 longa, 1 lata; anfr. 6.

Hab. in ora Maderæ septentrionali, inter exempla haud pauca *P. concinna* Lowe, in convalle “Rib. do Inferno” (ut fertur) propter illustr. Baronem do Castello de Paiva collecta, a cl. Wollastono detecta. Nomen itaque ferat species pulcherrima in honorem oculatissimi *Puparum* Maderensium indagatoris, qui tantis speciebus novis genus jam olim locupletavit.

At once distinguished from *P. concinna* Lowe by its much greater proportionate breadth and short, thick, squarish figure; and from *P. gibba* and *P. abbreviata*, besides other differences, by its being so much larger. There is also much about it which reminds one of *P. cassida* and *P. cassidula*: but it is most distinct from all, especially by the abrupt contraction of the spire above the last two or three volutions, and by the scalariform character of these, each rising up into a blunt keel or ridge below the deeply impressed or subcanaliculated suture. The colour also is peculiar, being more of a dark umber than chestnut-brown, with two remote, narrow pale bands, one at the base, the other on the infra-sutural ridge or shoulder at the top of the last volution; but these will probably prove variable, and even in the present example the upper band is obscure and inconspicuous. The spire is abruptly contracted above the second or third volution into a short obtuse decorticated umbo; the lowest two or three volutions are of nearly equal breadth, or broadly

and shortly barrel-shaped, and the last is spirally concave or slightly grooved or channelled a little way backwards from the outer lip below the middle. The aperture, both in shape and in the form, size, and proportion of its plaits, differs from that of all the species above mentioned. The umbilicus is moderately large and infundibuliform.

A unique example of this fine new *Pupa*, with the remains of its animal still present in the aperture, was detected by T. Vernon Wollaston, Esq., the well-known explorer of the Atlantic insect fauna, and author of 'Insecta Maderensia,' 'Canariensia,' &c., in a box containing a number of specimens of *P. concinna* Lowe, sent to him from Madeira, about a year ago, by the Baron do Castello de Paiva, and marked "Rib. do Inferno." Though some doubt therefore must necessarily attach to the precise habitat of this particular single specimen, there can be no question whatever, with any one whose eye has become at all versed in the aspect of Madeiran *Pupæ*, as to its having been really collected in the north of the island, and probably in one of the few haunts of *P. concinna*—namely, at the head of the Rib. de João Delgado (not far remote from that of the Rib. do Inferno) or of the Boa Ventura on the north side of the Pico Casado, at a considerable elevation.

This discovery is therefore a fresh instance of the great obligations of naturalists to the indefatigable exertions of the Baron do Castello de Paiva, who, though unhappily precluded by ill health from prosecuting his botanical and zoological researches personally, is yet contributing continually, by his employment or encouragement of others, some new acquisition of interest or importance to the domains of what is now termed, euphemistically, "science."

XVIII.—Remarks on the History of *Dreissena polymorpha*.

By Dr. OTTO A. L. MÖRCH.

IN a review of 'The Record of Zoological Literature' (Ann. & Mag. N. Hist. Dec. 1866, p. 494) an extract is given from a critique of Dr. E. von Martens, to the effect that my opinion as to the identity of *Pinna fluviatilis*, Sander, with *Dreissena polymorpha* depends on an analysis of Sander's account and on "the analogous fact that the occurrence of the genus *Unio* in Denmark remained unknown to so careful an observer as O. F. Müller."

This is a mistake. I rely mainly on the facts that Sander refers his shell to the genus *Pinna*, and that he expressly states that his shell is not figured in Schröter's work on freshwater shells,